

This cryostat is manufactured by [Oxford Instruments](#) and is compatible with the [Continuum microscope](#) on [Beamline 1.4.4](#).

The Microstat®He Rectangular Tail works on a continuous flow principle using an oil-free pump to draw liquid helium from a storage vessel along a transfer tube to the Microstat heat exchanger. Temperature control is achieved by a combination of manual helium flow control and power dissipated in an electrical heater, regulated using a temperature controller. The cryostat can also be used in "push mode", in that case the flow of liquid helium is generated by pressurising the storage dewar. The advantage is that the need for a gas flow pump is removed thus saving cost and eliminating the noise and vibration generated by the pump.

The Microstat®He will also operate with liquid nitrogen as coolant for measurements to 80K.